



Prof. Sung Beom Cho

(Ajou University, Republic of Korea)

Sung Beom Cho is an Assistant Professor at Ajou University, where he is establishing a research program in computational materials science and materials informatics. He earned his Ph.D. from Hanyang University in 2017 and completed postdoctoral research at Washington University in St. Louis from 2017 to 2018. As a Senior Researcher at KICET from 2018 to 2022, Dr. Cho supported industrial applications, particularly in electronic and energy systems, utilizing various computational tools. His research focuses on leveraging computational methods to understand and predict the behavior of various materials.

Dr. Cho has expertise in multi-scale simulation, including Density Functional Theory (DFT), Molecular Dynamics (MD), and Finite Element Method (FEM), as well as thermodynamics and nucleation theory. By combining these methodologies with machine learning, he works on materials design based on high-throughput screening, synthetic behavior based on nucleation theory, and predicting device characteristics. He is also interested in polymorph control, epitaxy relations, and precursor engineering in diverse electronic materials.